Distboard Manager – User guide

Thank you for taking an interest or purchasing Distboard Manager for Microsoft Excel 2002 & onwards.
NOTE: All the databases and charts listed in this document including information contained within them are made up results.

I hope it helps you as much as it has helped me during my ongoing career as an electrician, although much effort has already gone into the creation of Distboard Manager, I am always happy to receive any comments or concerns you may have purely in relation to Distboard Manager and its functionality to **alanwelsman@alanwelsman.co.uk**.

Distboard Manager's sole purpose is to help make your daily routine easier by helping you manage your LV system, from small scale single board domestic installations to large scale three phase industrial installations, you don't even need to be an electrician to use Distboard Manager, as long as you can comfortably navigate your way around Microsoft Excel and are familiar with electrical test results, you are already qualified.

Use Distboard Manager to point out failures in LV Distribution Board schedules provided to you by highly paid consultants, pre-load them into Distboard Manager and by using Distboard Manager's "**Search**" engine create multiple reports of inconsistencies you know as an electrician go against your electrical installation background, a few examples such as:

1. Ring circuits with 1 single item on them.
2. Radial circuits protected by devices greater than the current carrying capacity of the cable.
3. Circuits feeding sockets for non-fixed appliances without RCD protection.
4. Circuits which are longer than the recommended length for its conductor size.
5. Circuits which have RCD protection for devices which form a life circuit and must be MCB only.

Note 1: Where written DM simply means Distboard Manager.
Note 2: When you open DM, you will see an information page, if you chose to disable macro's, the information page is all you will see.
Note 3: When you close DM, you will not be asked to save, DM will automatically save upon exiting to ensure all data is saved.
Note 4: When you select "Save As" DM will create a backup of itself called "Distboard Manager - Backup".

Please be aware, before you can use Distboard Manager, it has to be locked to your PC within 2 open and close events, failure to lock will render Distboard Manager non-functional.

1. When you purchase DM, your registered Paypal email address will be the only email address used for all DM correspondence regards the request for a keycode for the unlocking / locking process.
2. Please ensure you have installed the component **Visual Basic** prior to running DM, DM will not function correctly without it.
3. When you open DM, you will be asked to enable/disable macro's, please enable them.
4. Macro's within DM are safe, they are small automated programs which run in the background, only run when called upon.
5. Each time DM is opened, you will be shown the "**Access**" page where you will need to enter your keycode.
6. To obtain your keycode, press either **CTRL+Shift+Z** or **CTRL+Z** keys to display your computer's MAC address.
7. When asked "**Can Distboard Manager be registered to this PC?**", press "**Yes**"
8. Send the onscreen MAC code to **alanwelsman@alanwelsman.co.uk** from the registered Paypal email address.
9. From the return email, enter the keys exactly as detailed into DM / **Access**, this only needs to be done only once.
10. When the keys are entered, the message "**UNLOCKED**" should appear, if so, proceed to use DM.

To help you understand and use DM, we will go through section in turn.

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Problem Solving

If you try to use DM and find things are not working as they should do, try the following.

1. Close DM then Re-Open, when asked to enable/disable macro's, please enable them.
2. **Status don't display DB details**: Ensure in "**System**" you have entered details into **Board Name & Location / Area** column.
3. **Status, Active or Search don't display DB details**: Ensure you press the "**Refresh**" buttons on each of the worksheets.
4. **Screen size does not automatically change**: Ensure when you open DM, you enable macro's.
5. **Excel does not appear to be calculating or changing values**: Ensure Excel **Tools / Options / Calculations** is set to "**Automatic**"

Hyperlink issues arose after uninstalling Google Chrome on a Windows based PC, many DM hyperlinks ceased to function, there is an issue where the registry file is not completely reset during the uninstallation process, this can be fixed but recommend should be done only by users experienced in the Microsoft Windows system registry file, the fix is to search for all values labelled "**ChromeHTML**" or "**FireFoxHTML**" and rename them as "**htmlfile**".

System Requirements

DM has been written within the parameters of Microsoft Excel version 2002 (v10.0), 32 bit running on a Microsoft Windows based PC.
At the time of writing, the version's of Microsoft Windows were, XP version 7.
The current version of DM has been tested using Excel 2003 (v11.0), 2007 (v12.0), 2010 (v14.0) without any issues.
At the time of writing, is has not yet been tested on Excel 2013 (v15.0).

Minimum requirements is to have a Windows based computer system running Excel 2002.

Feedback

If you use DM and believe you have an idea which could be integrated into DM and its future revisions, please feel free to email me your comments, if your idea does become a part of DM, as a thank you from me, I will ensure your version of DM including all future revisions of DM are fully activated and functional for as long as you use it.

If you disagree with a comment or function I have written into DM, again feel free to comment: **alanwelsman@alanwelsman.co.uk**

Access

This is how DM is unlocked, it must first be locked to a PC then each time you need to use it, press **CTRL+Shift+Z** or **CTRL+Z** keys.

Prefs

This is where you can adjust some of the parameters of DM, split into 9 sections as follows:

v1.09

Welcome to Distboard Manager

Abbey Lodge Mill, Fictional Lane, Surrey, SK3 11HN

General Info

1	Enter the maximum **%** of BS7671 Zs value / Correction factor multiplier >	80.00%		1			
2	Enter the warning **%** of board population / Breaker Breakdown prefix >	75.00%		P			
3	Enter "**Old**" or "**New**" phase colours / Force cable as phase colour >	New					
4	Test instrument "**Type**" or "**Continuity & Resistance**" Serial No >	Megger					
5	Test instrument "**Model**" or "**Earth Loop & PSC**" Serial No >	MFT1710					
6	Test instrument "**Serial Number**" or "**RCD**" Serial No >	SN0122103556					
7	Test instrument "**Calibration Date**" >	01-Jan-2015					
8	Enter an RCBO trip time code suffix >	s					
9	Uo nominal phase voltage to earth (TN) >	230					
10	Table 41.1 applies to circuits up to (Amps) >	32					
11	Preferred CPC if running external to SWA >	6491B					
12	Codes for Protective Device, Type, kA, mA, Cabling Type & Installation Method >	I2	Type	kA	mA	Ct	Md
13	Preferred codes for "Protective Device BSEN" & "Trip Time" >	Trip		BSEN		Time	
14	When copying a "Schedule" to "Chart", display "Chart" with vertical lines "Y" >						

Toggle Supply Info Information from System

1	Enter information for "**Origin**" - Leave blank to exclude >	Origin
2	Enter information for "**Sw Model**" - Leave blank to exclude >	Sw Mod
3	Enter information for "**Sw Rating**" - Leave blank to exclude >	Sw Rtg
4	Enter information for "**Sw BSEN**" - Leave blank to exclude >	Sw BSEN
5	Enter information for "**Phase(s)**" - Leave blank to exclude >	Phase(s)
6	Enter information for "**Cab I.D**" - Leave blank to exclude >	Cab I.D
7	Enter information for "**Cab Type**" - Leave blank to exclude >	Cab Type
8	Enter information for "**CPC**" - Leave blank to exclude >	CPC
9	Enter information for "**Earthing**" - Leave blank to exclude >	Earthing
10	Enter information for "--" - Leave blank to exclude >	

Toggle Board Info Information from Boards

1	Enter "Board Specific" info for "**Sw Model**" - Leave blank to exclude >	Sw Mod
2	Enter "Board Specific" info for "**Sw Rating**" - Leave blank to exclude >	Sw Rtg
3	Enter "Board Specific" info for "**Sw BSEN**" - Leave blank to exclude >	Sw BSEN
4	Enter "Boards" info for "**Manufacturer**" - Leave blank to exclude >	Mfr
5	Enter "Boards" info for "**Range**" - Leave blank to exclude >	Rng
6	Enter "Boards" info for "**Model**" - Leave blank to exclude >	Model
7	Enter "Boards" info for "**Type**" - Leave blank to exclude >	Form
8	Enter "Boards" info for "**BSEN**" - Leave blank to exclude >	BSEN
9	Enter "Boards" info for "**BUS**" - Leave blank to exclude >	BUS
10	Enter "Boards" info for "**Ways**" - Leave blank to exclude >	Ways
11	Enter "Boards" info for "**kA**" - Leave blank to exclude >	kA
12	Enter "Boards" info for power if load "**Split**" - Leave blank to exclude >	Pwr

Cables used as CPC's

Cable 1 >	6491B	Cable 6 >	
Cable 2 >		Cable 7 >	
Cable 3 >		Cable 8 >	
Cable 4 >		Cable 9 >	
Cable 5 >		Cable 10 >	

Which cables have Ext CPC's

Cable 1 >	2C SWA	Cable 6 >	2x4C SWA
Cable 2 >	3C SWA	Cable 7 >	
Cable 3 >	4C SWA	Cable 8 >	
Cable 4 >	3C FP400	Cable 9 >	
Cable 5 >	3x4C SWA	Cable 10 >	

Table 41.1

	Uo Range 1 50 V < Uo = 120 V		Uo Range 2 120 V < Uo = 230 V		Uo Range 3 230 V < Uo = 400 V		Uo Range 4 Uo > 400 V		Any Voltage
	AC	DC	AC	DC	AC	DC	AC	DC	AC or DC
TN	0.8	Note 1	0.4	5	0.2	0.4	0.1	0.1	5
TT	0.3	Note 1	0.2	0.4	0.07	0.2	0.04	0.1	5
Maximum disconnection times for circuits using protective devices rated up to 32A									32A >

Table MCB Types

Calculating max Zs values - 5 steps			
1	Choose device type	(Type **C** - Max value)	10
2	Choose device rating	(32A)	32
3	Multiply Type x Rating		320
4	Uo Volts	(Generally 230v)	230
5	Divide answer of 4 by answer of 3 (Ohms)		0.72

	Type	Min	Max
Domestic & Commercial >	1	2.7	4
	B	3	5
General Use & Small Motors >	2	4	7
	C	5	10
	3	7	10
High Inrush Current	D	10	20
	4		

Page Zoom %

Access	Prefs	System	MCB's	Boards	Labels
Yes	Yes	Yes	Yes	Yes	Yes
Charts	**Status**	**Active**	**Search**	**Test Sheets**	**[Future Use]**
Yes	Yes	Yes	Yes	90	

For further information about this software, please email alanwelsman@alanwelsman.co.uk

1. **Top of screen** Enter the site address which DM is to be used on e.g: "Abbey Lodge Mill", this area highlights green if empty.

2. **General Info** as follows.

2.1. Enter the **%** of BS7671 Zs value to remain, this is normally **80% /** Multiply by a correction factor, normally "**1**".
2.2. Enter the max board population **%**, this is normally **75% /** Breaker breakdown prefix, normally "**P**"
2.3. Enter "**Old**" or "**New**" phase colours, this is normally "**New**" **/** Force cable as phase colour, this is normally blank otherwise "**Y**"
2.4. Enter test instrument "**Continuity & Resistance**" Serial No, refer to instrument for its serial number.
2.5. Enter test instrument "**Earth Loop & PSC**" Serial No, refer to instrument for its serial number.
2.6. Enter test instrument "**RCD**" Serial No, refer to instrument for its serial number.
2.7. Enter test instruments "**Calibration Date**", Enter the date the test instruments were calibrated on, not when they expire.
2.8. Enter an **RCBO** trip time code suffix, normally "**s**" for seconds.
2.9. Enter the **Uo** nominal phase voltage to earth (TN), normally "**230**"
2.10. Table **41.1** applies to circuits up to (Amps), normally "**32**"
2.11. Preferred CPC if running external to SWA, normally "**6491B**"
2.12. Intentionally left blank
2.13. Intentionally left blank
2.14. When copying a "**Schedule**" to "**Chart**", display "**Chart**" with vertical lines "**Y**", normally left blank.

3. **Toggle Supply Info**: Adjust titles to be viewed in all test schedules to do with Supply Characteristics.

3.1. Enter information for "**Origin**", normally "**Origin**".
3.2. Enter information for "**Sw Model**", normally "**Sw Mod**".
3.3. Enter information for "**Sw Rating**", normally "**Sw Rtg**".
3.4. Enter information for "**Sw BSEN**", normally "**Sw BSEN**".
3.5. Enter information for "**Phase(s)**", normally "**Phase(s)**".
3.6. Enter information for "**Cab I.D**", normally "**Cab I.D**".
3.7. Enter information for "**Cab Type**", normally "**Cab Type**".
3.8. Enter information for "**CPC**", normally "**CPC**".
3.9. Enter information for "**Earthing**", normally "**Earthing**".
3.10. Intentionally left blank

4. **Toggle Board Info**: Adjust titles to be viewed in all test schedules to do with Distribution Boards.

4.1. Enter information for "**Sw Model**", normally "**Sw Mod**".
4.2. Enter information for "**Sw Rating**", normally "**Sw Rtg**".
4.3. Enter information for "**Sw BSEN**", normally "**Sw BSEN**".
4.4. Enter information for "**Manufacturer**", normally "**Mfr**".
4.5. Enter information for "**Range**", normally "**Rng**".
4.6. Enter information for "**Model**", normally "**Model**".
4.7. Enter information for "**Type**", normally "**Type**" or "**Form**".
4.8. Enter information for "**BSEN**", normally "**BSEN**".
4.9. Enter information for "**BUS**", normally "**BUS**" - Rating in Amps of the Busbar fitted within the Distribution Board.
4.10. Enter information for "**Ways**", normally "**Ways**" - For non-split load boards - enter No of ways in total.
4.11. Enter information for "**kA**", normally "**kA**".
4.12. Enter information for power of load "**Split**" - For split load boards - enter No of ways dedicated to Power.

5. **Cables used as CPC's.**

5.1. This is a table for up to 10 types of cables used as CPC's, cable 1, normally "**6491B**", cables 2 to 10 not used.

6. **Ext CPC's**: Enter the types of cables installed where you will run additional external CPC's.

6.1. This is a table for up to 10 types of cables which you run external CPC's with.
6.1a. Cable 1, **2C SWA**
6.1b. Cable 2, **3C SWA**
6.1c. Cable 3, **4C SWA**
6.1d. Cable 4, **3C FP400**
6.1e. Cable 5, **3x4C SWA**
6.1f. Cable 6, **2x4C SWA**
6.1g. Cable 7, Not used
6.1h. Cable 8, Not used
6.1i. Cable 9, Not used
6.1j. Cable 10, Not used.

7. **Table 41.1**: This section is used by DM as a lookup table to obtain disconnection times for protective devices up to 32A depending upon which type of electrical system voltage range is in use, the standard range is "**Uo Range 2**" giving us in an "**AC**" circuit on a "**TN**" system "**0.4**" seconds and on a "**TT**" system "**0.2**" seconds.
Any circuit using a protective device greater than "**32**" amps regardless of "**AC**" or "**DC**" voltage type will have a "**5**" second disconnection time.

8. **Table for MCB Types**: This table shows how to calculate the "**Max Zs**" for a protective device.
The measured or calculated **Zs** for "**Ze+R1+R2**" must not go above the "**Max Zs**".

9. **Page Zoom**: If you are fed up with adjusting the page each time you view different worksheets, this section removes that issue. Here you can set each worksheet page zoom value as follows.

Example for Access.

Below the "**Access**" page tab are two empty boxes, the left box you enter "**Yes**" or "**No**".
If you enter "**Yes**" leave the box to the right empty, automatic zoom is now in operation.
If you enter "**No**" then enter in the box to the right the "**%**" of page zoom you want for that particular page.

Do this for all the DM tabs except the tab labelled "**Future Use**".

MCB's

This is a database of protective devices i.e. MCB / RCBO / Cartridge fuses etc, use their Max Zs values within all test schedules.

MCB Database

Code	Manufacturer	Model	Ia	Type	kA	mA	BSEN	Table	BS7671	New Zs
2D6			2	D	6		60898			4.60
2B10			2	B	10		60898	41.3		18.40
2C10			2	C	10		60898	41.3		9.20
3B10			3	B	10		60898	41.3		12.27
3			3				BS 1362	41.4	23.2	18.56
4D6			4	D	6		60898			2.30
4B10			4	B	10		60898	41.3	19.17	15.34
5			5				BS 1361	41.4	16.40	13.12
5			5				BS 3036	41.4	17.7	14.16
5T1			5	1					9.60	7.68
5T2			5	2					5.48	4.38
5T3			5	3					3.84	3.07
6B6			6	B	6		60898			6.13
6D6			6	D	6		60898			1.53
6B10			6	B	10		60898	41.3		6.13
6C10			6	C	10		60898	41.3		3.07
6D10			6	D	10		60898	41.3		1.53
6B1030			6	B	10	30	61009	41.3		6.13
6C1030			6	C	10	30	61009	41.3		3.07
6D1030			6	D	10	30	61009	41.3		1.53
6gG80			6	gG	80		BS 88-2.2	41.4	13.50	10.80
6T1			6	1					8.00	6.40
6T2			6	2					4.57	3.66
6T3			6	3					3.20	2.56

Note: Pressing a header box will sort the table in an ascending / descending order by the column header pressed.

1. **Code**: You can not enter details into this column but you will need the code produced here to enter into the test schedules.
2. **Ia**: Enter a current rating of device
3. **Type**: Enter the type of the device
4. **kA**: Enter the kA rating of the device
5. **mA**: Enter the mA rating of the device (normally applies to RCBO's)
6. **BSEN**: Enter the BSEN of the device
7. **Table**: Enter the table from BS7671 where specific protective device Zs values are to be used from
8. **BS7671**: Enter the actual Zs value per protective device as detailed in BS7671
9. **New Zs**: You can not enter details into this column, this column displays the "**New Zs**" after the % of Zs to remain has been entered in the **Prefs / General Info** section.

Note: If an entry in the column **BS7671** is not used, a figure will be automatically calculated for you, this will take into account the percentage of Zs to remain entered in the **Prefs / General Info** section.

Boards

This is a database for all the different types of Distribution Boards you may use from different manufacturers.
The details here are copied to all the test schedules, the two columns marked as **Labels** are used to set the widths of MCB labels specific to each distribution board.

Distribution Board Database

Manufacturer	Range	Model	Type	BSEN	Bus	Ways	kA	Split	Height	Width	Depth	Weight	Labels	
													Ver	Hor
ABB	Protecta	EPB25-1212S250CC	B	60439 1&3	250A	2 x 12			1010mm	800mm	125mm		17.25	13.92
ELECSIS		LVSB	B	60439 1&3	1000A	31			2200mm	4400mm	600mm	1500Kg		
Schneider	Acti 9 Isobar	SEA9AN27	A	61439-3	125A	27	16		530mm	417mm	117mm		18	12.57
MEM / Eaton	Memshield 2	BM241	B	60439-3	125A	24								
MEM / Eaton	Memshield 2	BM242	B	60439-3	200A	24								
MEM / Eaton	Memshield 3	EBM242	B	60439-3	125A	24			1180mm	440mm	140mm			
MEM / Eaton	Memshield 3	EBM242H	B	60439-3	250A	24			1501mm	440mm	140mm			
ABB	Protecta	EPB25-324C	B	60439 1&3	250A	24			1140mm	400mm	125mm		17.25	13.92
ABB	Protecta	PBSMF	B	60439 1&3	800A	24			2050mm	1470mm	240mm			
ABB	Protecta	PBSMG	B	60439 1&3	800A	24			2050mm	1470mm	240mm			
ABB	Protecta	PBSMS	B	60439 1&3	800A	24			2050mm	1470mm	240mm			
Schneider	Acti 9 Isobar	SEA9BN24	B	61439-3	250A	24	16		1024mm	470mm	140mm		18	12.57
ABB	Protecta	ECS120C	A	60439 1&3	100A	20			265mm	440mm	110mm		17.25	13.92
ABB	Protecta	EPB25-320C	B	60439 1&3	250A	20			1001mm	400mm	125mm		17.25	13.92
MEM / Eaton	Memera 2000	AP19	A	60439-3	100A	19								
MEM / Eaton	Memshield 3	EBM182	B	60439-3	125A	18			1021mm	440mm	140mm			
MEM / Eaton	Memshield 3	EBM182H	B	60439-3	250A	18			1342mm	440mm	140mm			
Schneider	Powerpact 4	MG6C18	3B T2	60439 1&3	630A	18	36		1808mm	850mm	270mm	98kg		
Schneider	Powerpact 4	MG8C18T	3B T2	60439 1&3	800A	18	50		2210mm	850mm	270mm	122kg		
Schneider	Acti 9 Isobar	SEA9AN18	A	61439-3	125A	18	16		300mm	489mm	117mm		18	12.57
Schneider	Acti 9 Isobar	SEA9BN18	B	61439-3	250A	18	16		862mm	470mm	140mm		18	12.57
MEM / Eaton	Memshield 2	AM16	A	60439-3	125A	16								
MEM / Eaton	Memshield 2	BM161	B	60439-3	125A	16								
MEM / Eaton	Memshield 2	BM162	B	60439-3	200A	16								
MEM / Eaton	Memshield 3	EAM16	A	60439 1&3	125A	16			254mm	454mm	140mm			
ABB	Protecta	ECS116C	A	60439 1&3	100A	16			265mm	368mm	110mm		17.25	13.92
ABB	Protecta	EPB25-316C	B	60439 1&3	250A	16			830mm	400mm	125mm	20.2Kg	17.25	13.92
Schneider	Acti 9 Isobar	SEA9BN16	B	61439-3	250A	16	16		862mm	470mm	140mm		18	12.57
GPS		GPS01	F4 T2	60439 1&3	2160A	15			2325mm	3010mm	750mm	1500Kg	17.25	13.92

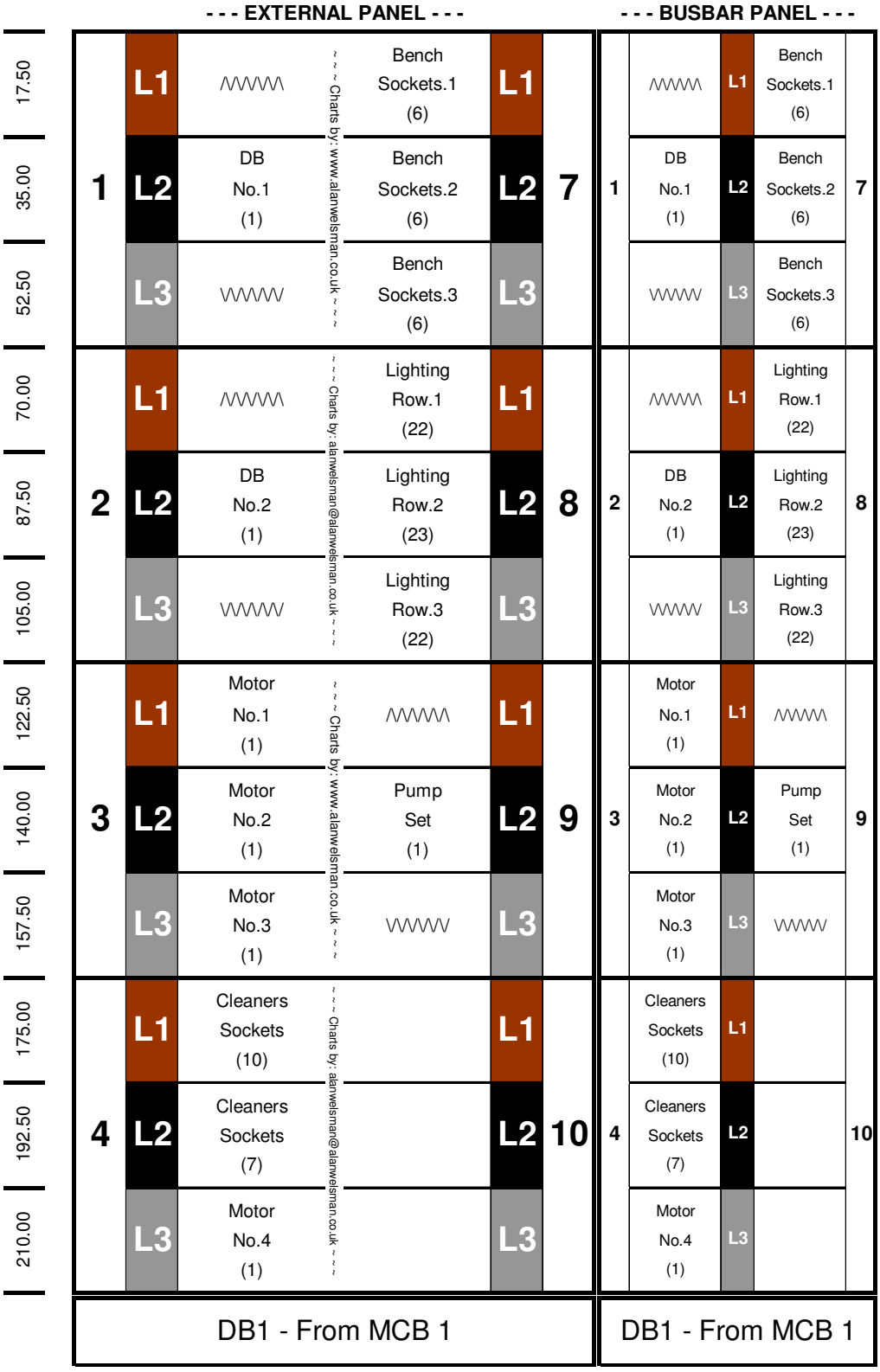
Note: Pressing a header box will sort the table in an ascending / descending order by the column header pressed.

1. **Manufacturer**: Enter the Distribution Board's manufacturer
2. **Range**: Enter the Distribution Board's range
3. **Model**: Enter the Distribution Board's model number
4. **Type**: Enter the Distribution Board's type, Type "A" normally single phase, Type "B" normally three phase.
5. **BSEN**: Enter the Distribution Board's BSEN number
6. **Bus**: Enter the Distribution Board's busbar rating in amps.
7. **Ways**: For non-split load boards - enter No of ways in total
8. **kA**: Enter the Distribution or Panel Board's kA rating.
9. **Split**: For split load boards - enter No of ways dedicated to Power.
10. **Height**: Enter the Distribution Board's external height dimensions
11. **Width**: Enter the Distribution Board's external width dimensions
12. **Depth**: Enter the Distribution Board's external depth dimensions
13. **Weight**: Enter the Distribution Board's total weight in Kg
14. **Ver**: Enter the Distribution Board's "Excel" depth of each of the MCB's, normally "**17.25**"
15. **Hor**: Enter the Distribution Board's "Excel" width between the two rows of MCB's, normally "**13.92**"

Note: If you print a label and find its different from the value entered, you can adjust to find the "Excel" value.
On the "**Labels**" tab, within the adjusting table, click the buttons till you find the correct label, enter those new values as "Ver"/"Hor".

Labels

This is where you can generate Distribution Board MCB labels, information here is used from details stored within the test schedules and when inserted, give the distribution board the professional finish, both external and internal busbar cover legends are generated.



Distribution Board

DB1

MCB Start No

1

Board Setup

TP&N

Ver 18.00 Hor 12.57

R

17.25 13.92

Recommended Size

12 Ways

SPLIT

1 ⇩ 6 Pwr 12 7 ⇩ 12

Mains / Meters

Note: For best results, use Avery inkjet adhesive labels ref: **J8167-100 199.6x289.1mm** or if using a laser printer or copier use Avery laser adhesive labels ref: **L7167-100 199.1x289.1mm**.

Printed in colour, these sheets produce an excellent finish, simply print the label, cut around the black boxes, peel the backing off then place inside the distribution boards.

1. **Distribution Board**: Select from the drop down arrow a specific distribution board.
2. **MCB Start No**: Select a starting point to print from.
3. **Board Setup**: This will tell you if your Distribution Board is single or three phase, simply click the result to have the legends automatically setup, note that single phase boards will be setup in their phase colour.
4. **Recommended Size**: Adjust the label width and height, when you find an exact print size matching your distribution board, enter its details as displayed into the **Boards** section, then from this point, each time this board is selected, the page will auto adjust for you.
5. **Distribution Board Layout**: This is to show you how your board is setup, for information only.
6. **RESET**: Pressing this button will reset the page to normal view, only the main label is adjusted in width.

Charts

This is where you can generate Distribution Board charts, this is an automated process and has no direct text input.

Distboard manager
alanwelsman.co.uk / alanwelsman@alanwelsman.co.uk 2014

Distribution Board Reference

DB1

Origin, Sw Rtg, Sw BSEN, Phase(s)	Cab I.D, Cab Type, CPC, Earthing	Earth Loop (?)	PSC (kA)
MLV 1L123, 250A, 60947-2, 3	*A1, 4C185SWA, C95, TN-S*	*0.06 / 0.06 / 0.06*	*3.4 / 3.4 / 3.4*

Mfr, Rng, Model, Type, BSEN	Sw Rtg, Sw BSEN, BUS, Ways
ABB, Protecta, EPB25-312C, B, 60439 1&3	*250A, 60947-3, 250A, 12*

H: 718mm, W: 400mm, D: 125mm, Wt: 16.3Kg

Location: Plantroom No.1

Phase		I2	Type	kA	mA	BSEN	Time	Circuit Description	Circuit	Cabling	Ct	Md	Cct	CPC	Length	Qty
1	L1	20	B	6		60898		/\/\/\/\/\	Radial	4C SWA	G2	31	2.50	2.50	66.00	1
	L2	20	B	6		60898		DB No.1	Radial	4C SWA	G2	31	2.50	2.50	66.00	1
	L3	20	B	6		60898		\/\/\/\/\/	Radial	4C SWA	G2	31	2.50	2.50	66.00	1
2	L1	32	C	10		60898		/\/\/\/\/\	Radial	4C SWA	G2	31	4.00	4.00	35.00	1
	L2	32	C	10		60898		DB No.2	Radial	4C SWA	G2	31	4.00	4.00	35.00	1
	L3	32	C	10		60898		\/\/\/\/\/	Radial	4C SWA	G2	31	4.00	4.00	35.00	1
3	L1	6	D	10		60898		Motor No.1	Radial	3C SWA	G2	31	1.50	1.50	18.00	1
	L2	10	D	10		60898		Motor No.2	Radial	3C SWA	G2	31	1.50	1.50	26.00	1
	L3	16	D	10		60898		Motor No.3	Radial	3C SWA	G2	31	2.50	2.50	32.00	1
4	L1	32	C	10	30	61009	0.4s	Cleaners Sockets	Ring	6491B	D/B	10/4	4.00	4.00	86.00	10
	L2	32	C	10	30	61009	0.4s	Cleaners Sockets	Ring	6491B	D/B	10/4	4.00	4.00	48.00	7
	L3	40	D	6		60898		Motor No.4	Radial	3C SWA	G2	31	6.00	6.00	40.00	1
5	L1	63	C	10		60898		/\/\/\/\/\	Radial	4C SWA	G2	31	10.00	10.00	112.00	1
	L2	63	C	10		60898		DB No.3	Radial	4C SWA	G2	31	10.00	10.00	112.00	1
	L3	63	C	10		60898		\/\/\/\/\/	Radial	4C SWA	G2	31	10.00	10.00	112.00	1
6	L1															
	L2															
	L3															
7	L1	32	C	10	30	61009	0.4s	Bench Sockets.1	Ring	6491B	D/B	10/4	4.00	4.00	35.00	6
	L2	32	C	10	30	61009	0.4s	Bench Sockets.2	Ring	6491B	D/B	10/4	4.00	4.00	54.00	6
	L3	32	C	10	30	61009	0.4s	Bench Sockets.3	Ring	6491B	D/B	10/4	4.00	4.00	28.00	6
8	L1	6	B	10		60898		Lighting Row.1	Radial	6491B	D/B	10/4	1.50	1.50	80.00	22
	L2	6	B	10		60898		Lighting Row.2	Radial	6491B	D/B	10/4	1.50	1.50	80.00	23
	L3	6	B	10		60898		Lighting Row.3	Radial	6491B	D/B	10/4	1.50	1.50	80.00	22
9	L1	16	D	10		60898		/\/\/\/\/\	Radial	4C SWA	G2	31	4.00	4.00	35.00	1
	L2	16	D	10		60898		Pump Set	Radial	4C SWA	G2	31	4.00	4.00	35.00	1
	L3	16	D	10		60898		\/\/\/\/\/	Radial	4C SWA	G2	31	4.00	4.00	35.00	1
10	L1															
	L2															
	L3															
11	L1															
	L2															
	L3															
12	L1															
	L2															
	L3															

Cabling Type Codes (Ct)

A	B	C	D	E	F	G	H	O (Other)
PVC/PVC cables I.e T&E	PVC cables in metalic conduit	PVC cables in non-metalic conduit	PVC cables in metalic trunking	PVC cables in non-metalic trunking	F1. PVC/AWA F2. PVC/SWA	G1. XLPE/AWA G2. XLPE/SWA	Mineral Insulated	O1. FP200/LSF O2. FP400/SWA/LSF O3. SY/LSF

Installation Method Meanings (Md) - Refer to BS7671 table 4A2 for more information

No. 4 - CCC. B	Non-sheathed cable(s) in conduit on a wooden or masonry wall or spaced less than 0.3 x conduit diameter from it	No. 10 - CCC. B	Non-sheathed cable(s) in suspended cable trunking
No. 31 - CCC. E/F	Single-core or multicore cable(s) on perforated tray run horizontally or vertically		

1. Select any desired test schedule.
2. Press the following key sequence **CTRL+M**
3. To jump back to the specific test schedule, left mouse click the top **Distribution Board Reference** link.
4. Up to 12 installation method's are detailed in the bottom section of the chart.

Would you like your company logo inserted into the Chart? this can be done for you and at minimal cost.

System

This is where you manage the LV system, its primary role is to manage the sub-mains cabling, not the distribution cabling.
It is split up into 5 sections, treat each row as one separate circuit, again by pressing a header will sort the database.

LV System Setup

Supply / Origin Details								Submains Cabling					Board Name & Location			Board & Switch Specifics					ELR (Ǝ)			PSC (kA)		
Livened	Feed	S.Mod	SW	BSEN	Ph	Uo	Vt	ID	Cable	CPC	L	Earth	Board	Area	Location	B.Mod	S.Mod	SW	BSEN	K	L1	L2	L3	L1	L2	L3
05-01-2015	MLV 1L123		250A	60947-2	3	2		A1	4C185SWA	C95	60	TN-S	DB1	L0	Plantroom No.1	EPB25-312C		250A	60947-3		0.06	0.06	0.06	3.40	3.40	3.40

Supply / Origin Details

1. **Livened**: Enter the date at which this particular cable / board went live – enter as **dd-mm-yyyy**.
2. **Feed**: Enter a circuit reference i.e. TXS 1L123, this will become the circuit origin.
3. **SW**: Enter the switch/isolator/ACB (air circuit breaker) rating in amps.
4. **BSEN**: Enter the BSEN number of switch/isolator/ACB (air circuit breaker).
5. **Ph**: Enter the phase(s) of the supply, enter as **L1**, **L2**, **L3** or **3**.
6. **Uo**: Enter the **Uo Range** from **Prefs** the above supply falls under, normally **2**
7. **Vt**: Enter the **Voltage Type** the supply falls under, enter "**X**" for **DC** or leave blank for **AC**.

Submains Cabling

1. **ID**: Enter an ID specific to the cable – this should be the reference to be used on site SWA cables.
2. **Cable**: Enter the cable type, examples are **3x4C185SWA** (3 x 4C 185mm) or **4C16SWA** (4C 16mm) or **3C4FP400** (3C 4mm).
3. **CPC**: Enter the CPC material type, examples are **C185** (Copper 185mm) or **B-Bar** (Bus Bar).
4. **L**: Enter the length of the circuit, this applies to both feed & earth cables (not combined length).
5. **Earth**: Enter the earthing arrangement, Enter as **TT**, **TN-S** or **PME**

Board Name & Location

1. **Board**: Enter the distribution board reference as detailed on site drawings.
2. **Area**: Enter the area examples are **L0N** (Level Zero North), **L1E** (Level 1 East), **L2S** (Level 2 South), **L3W** (Level 3 West) etc.
3. **Location**: Enter the room or location the distribution board has been installed to.

Board Specifics

1. **Model**: Enter the model of the distribution board – ensure to use the same model ref no as entered within the **Boards** section.
2. **SW**: Enter the switch/isolator rating in amps, this is the main switch fitted within the distribution board itself.
3. **BSEN**: Enter the BSEN number of switch/isolator.
4. **K**: If your distribution board is either single phase or a **kit** has been used to convert from 3 phase to single phase, enter "**Y**".

Note: You must enter a value in the "**Area**" column against your distribution board reference, "**Status**" may not display records.

ELR (Ohms) / PSC (kA)

1. **L1**: Enter the measured Earth Loop Resistance (Ohms) reading of the L1 phase to Earth (not phase to phase).
2. **L2**: Enter the measured Earth Loop Resistance (Ohms) reading of the L2 phase to Earth (not phase to phase).
3. **L3**: Enter the measured Earth Loop Resistance (Ohms) reading of the L3 phase to Earth (not phase to phase).
4. **L1**: Enter the measured Prospective Short Circuit (kA) reading of the L1 phase to Earth (not phase to phase).
5. **L2**: Enter the measured Prospective Short Circuit (kA) reading of the L2 phase to Earth (not phase to phase).
6. **L3**: Enter the measured Prospective Short Circuit (kA) reading of the L3 phase to Earth (not phase to phase).

Repeat the above for all circuits of each of the **PB's** panel-boards, not **DB's** distribution boards.

Status (RED TAB)

This is where you can find up to date information about your LV system.

Distboard manager

danwelsman.co.uk / danwelsman@danwelsman.co.uk © 2014

Distribution Status

Match board or area:

	Board & No of Ways			Populated	Cabled	Dead	Live Tests
1	TXS 1-12	Y	6	88.89%	100.00%	43.75%	100.00%
2	LVSB 1-12	Y	24				
2	LVSB 13-24	Y	24	100.00%	100.00%	83.33%	100.00%
3	PBSMS 1-12	Y	24				
3	PBSMS 13-24	Y	24	66.67%	100.00%	64.58%	100.00%
4	PBSMF 1-12	Y	24				
4	PBSMF 13-24	Y	24	66.67%	100.00%	70.83%	100.00%
5	PBSMG 1-12	Y	24				
5	PBSMG 13-24	Y	24	80.56%	100.00%	74.14%	100.00%
6	DBPLANT 1-12	Y	12	77.78%	100.00%	96.43%	100.00%
7	DBLIFT1 1-12	Y	1				
8	DBLIFT2 1-12	Y	1				
9	DBLIFT3 1-12	Y	1				
10	DBLIFT4 1-12	Y	1				
11	DBLIFT5 1-12	Y	1				
12	MCP-3-01 1-12	Y	48				
12	MCP-3-01 13-24	Y	48				
12	MCP-3-01 25-36	Y	48				
12	MCP-3-01 37-48	Y	48	77.08%	100.00%	97.30%	100.00%
13	CHILLER 1-12	Y	1				
14	DBCU 1-12	Y	6	22.22%	100.00%	100.00%	100.00%
15	DBVP1 1-12	Y					
16	DBVP2 1-12	Y					
17	DBVP3 1-12	Y					
18	DBMAP1 1-12	Y					
19	DBMAP2 1-12	Y					
20	DBMAP3 1-12	Y					
21	DBSP1 1-12	Y	16				
21	DBSP1 13-24	Y	16	52.08%	100.00%	100.00%	100.00%
22	DBSP2 1-12	Y	16				
22	DBSP2 13-24	Y	16	56.25%	100.00%	100.00%	100.00%
23	DBSP3 1-12	Y	16				
23	DBSP3 13-24	Y	16	43.75%	100.00%	100.00%	100.00%
24	DBSP4 1-12	Y	16				
24	DBSP4 13-24	Y	16	64.58%	100.00%	100.00%	100.00%
25	DBSP5 1-12	Y	16				
25	DBSP5 13-24	Y	16	66.67%	100.00%	100.00%	100.00%
26	DBSL1 1-12	Y	8	37.50%	100.00%	100.00%	100.00%
27	DBSL2 1-12	Y	8	58.33%	100.00%	100.00%	100.00%
28	DBSL3 1-12	Y	8	33.33%	100.00%	100.00%	100.00%
29	DBSL4 1-12	Y	8	50.00%	100.00%	100.00%	100.00%
30	DBSL5 1-12	Y	8	75.00%	100.00%	100.00%	100.00%
31	DBIT3 1-12	Y	11	63.64%	100.00%	100.00%	100.00%
32	DBFP1 1-12	Y	16				
32	DBFP1 13-24	Y	16	52.08%	100.00%	100.00%	100.00%
33	DBFP2 1-12	Y	16				
33	DBFP2 13-24	Y	16	56.25%	100.00%	100.00%	100.00%
34	DBFP3 1-12	Y	16				
34	DBFP3 13-24	Y	16	43.75%	100.00%	100.00%	100.00%
35	DBFP4 1-12	Y	16				
35	DBFP4 13-24	Y	16	64.58%	100.00%	100.00%	100.00%
36	DBFP5 1-12	Y	16				
36	DBFP5 13-24	Y	16	70.83%	100.00%	100.00%	100.00%
37	DBFL1 1-12	Y	8	37.50%	100.00%	100.00%	100.00%
38	DBFL2 1-12	Y	8	58.33%	100.00%	100.00%	100.00%
39	DBFL3 1-12	Y	8	37.50%	100.00%	100.00%	100.00%
40	DBFL4 1-12	Y	8	45.83%	100.00%	100.00%	100.00%
41	DBFL5 1-12	Y	8	66.67%	100.00%	100.00%	100.00%
42	DBIT2 1-12	Y	11	63.64%	100.00%	100.00%	100.00%
43	DBHSF 1-12	Y	8	12.50%	100.00%	100.00%	100.00%
44	DBGP1 1-12	Y	16				
44	DBGP1 13-24	Y	16	54.17%	100.00%	100.00%	100.00%
45	DBGP2 1-12	Y	16				
45	DBGP2 13-24	Y	16	52.08%	100.00%	100.00%	100.00%
46	DBGP3 1-12	Y	16				
46	DBGP3 13-24	Y	16	54.17%	100.00%	100.00%	100.00%
47	DBGP4 1-12	Y	16				
47	DBGP4 13-24	Y	16	56.25%	100.00%	100.00%	100.00%
48	DBGP5 1-12	Y	16				
48	DBGP5 13-24	Y	16	60.42%	100.00%	100.00%	100.00%
49	DBGL1 1-12	Y	8	45.83%	100.00%	100.00%	100.00%
50	DBGL2 1-12	Y	8	58.33%	100.00%	100.00%	100.00%
51	DBGL3 1-12	Y	8	45.83%	100.00%	100.00%	100.00%
52	DBGL4 1-12	Y	8	45.83%	100.00%	100.00%	100.00%
53	DBGL5 1-12	Y	8	66.67%	100.00%	100.00%	100.00%
54	DBK 1-12	Y	8	62.50%	100.00%	100.00%	100.00%
55	DBIT1 1-12	Y	11	100.00%	100.00%	100.00%	100.00%
56	DBHSG 1-12	Y	8	79.17%	100.00%	100.00%	100.00%
57	DBFPX1 1-12	Y	4	75.00%	100.00%	88.89%	100.00%
58	DBFPX2 1-12	Y	4	75.00%	100.00%	100.00%	100.00%

Cabling	Qty's
19C SWA 2.5	200
2x4C SWA 185.0	153
2C SWA 25.0	92
2C SWA 35.0	32
3C SWA 10.0	281
3x4C SWA 185.0	46
3C SWA 2.5	642
3C SWA 35.0	146
3C SWA 4.0	382
4C SWA 120.0	34
4C SWA 150.0	12
4C SWA 16.0	267
4C SWA 185.0	62
4C SWA 25.0	1701
4C SWA 35.0	335
4C SWA 50.0	265
4C SWA 70.0	122
5C SWA 4.0	5
6491B Brn 1.5	710
6491B Brn 10.0	57
6491B Brn 2.5	11564
6491B Brn 4.0	34303
6491B Brn 6.0	114
6491B 1.5	502
6491B 2.5	10762
6491B 4	34065
6491B 6	38
6491B 10	21
6491B 1.5	502
6491B 2.5	11404
6491B 4	34447
6491B 6	38
6491B 10	302
6491B 16	267
6491B 25	1793
6491B 35	513
6491B 50	265
6491B 70	122
6491B 120	34
6491B 150	12
6491B 185	261

Overall % Cabled & Tested

100.00%

93.18%

100.00%

Circuits to cable

Breakers connected **1055**

DB way's populated **1055**

Breaker Breakdown

1P 2D6 **2**	1P 4D6 **7**	1P 6D6 **9**
1P 10C6 **1**	1P 10D6 **2**	1P 16D6 **2**
1P 20D6 **1**	3P 2D6 **3**	3P 4D6 **2**
3P 10D6 **4**	3P 16D6 **12**	3P 20D6 **5**
3P 25D6 **1**	3P 40D6 **2**	1P 6B10 **1**
1P 6B1030 **14**	1P 6C10 **116**	1P 6C1030 **61**
1P 10B10 **3**	1P 10C10 **29**	1P 16B10 **16**
1P 16B1030 **12**	1P 16C10 **3**	1P 20B10 **122**
1P 20B1030 **31**	1P 20C10 **1**	1P 32B1030 **275**
1P 63C10 **3**	1P 63E35 **1**	1P 100E35 **7**
3P 16C10 **1**	3P 32C10 **1**	3P 63C10 **3**
3P 63E35 **12**	3P 80E35 **5**	3P 100E35 **49**
3P 200E35 **1**	3P 250E35 **2**	3P 400E35 **5**
3P 630E35 **2**	3P 1000E35 **1**	3P 1250E35 **1**

MCB / RCBO Codes

Poles . Amps . Type . kA . mA

1P or 3P . 32 . C . 10 . 30

1. **Distribution Status**: In this box you can enter a unique distribution board by number i.e. **1 to 80** as presented down the left most column or to enter an area you made up within the **System / Board Name & Location / Area** column i.e. **L0N**, **L1E**, **L2S**, **L3W**.
2. If you leave the "**Match board or area**" box blank, you will be presented with the global totals of your LV system.
3. You can toggle between test schedule error checking or display the number of distribution board ways by clicking either message: "**Board Reference**" to show "**Board & No of Ways**" or "**Populated, Cabled, Dead & Live Tests**" to show "**Board Reference**".
4. If an error message appears as the header title reads "**Board Reference**", simply left click the distribution board reference to be taken to that schedule to see your error.
5. Displayed within the left hand side are details showing 1) **% of board populated**, 2) **% of board populated which is cabled**, 3) **% of what is cabled, dead tested**, 4) **% of what is cabled, live tested**, all results are shown per board.
6. The middle section relates to cabling, top displays sub-mains as well as phase orientated conductors in various sizes.
7. The middle section, middle displays neutral conductors and the bottom displays earthing conductors in various sizes.
8. The right hand section is to display global details, starting at the top in red shows the **% of Live testing** completed, below in green shows the **% of Dead testing** completed, below in blue shows the **% of cabling** completed, the number of circuits yet to cable, the number of breakers which have been cabled and the total number of populated ways.
9. The right hand section, bottom is to display all the protective devices in use, they are sorted into single and three pole devices, then into current ratings showing how many per type are installed.

Note 1: You can adjust the **% of board populated** in the **Prefs / General Info / Item 2** section.
Note 2: When you create, modify or delete test schedules, ensure you press the "**Refresh**" button, this is a small square button located on the right hand side of the box labelled "**Overall % Cabled & Tested**", this button can be pressed any time.
Note 3: When you match a board or area, the details of that distribution board will be detailed for you.

Active (GREEN TAB)

This is where you can see at a glance all the circuits installed throughout your entire LV system.

1055 MCB's installed

Cabling Req > Testing Req >

	Board	MCB's currently installed throughout all the distribution boards
1	TXS 1-12	1L1 1L2 1L3 2L1 2L2 2L3 3L1 3L2 3L3 4L1 4L2 4L3 5L1 6L1 6L2 6L3
2	LVSB 1-12	1L1 1L2 1L3 2L1 2L2 2L3 3L1 3L2 3L3 4L1 4L2 4L3 5L1 5L2 5L3 6L1 6L2 6L3 7L1 7L2 7L3 8L1 8L2 8L3 9L1 9L2 9L3 10L1 10L2 10L3 11L1 11L2 11L3 12L1 12L2 12L3
2	LVSB 13-24	13L1 13L2 13L3 14L1 14L2 14L3 15L1 15L2 15L3 16L1 16L2 16L3 17L1 17L2 17L3 18L1 18L2 18L3 19L1 19L2 19L3 20L1 20L2 20L3 21L1 21L2 21L3 22L1 22L2 22L3 23L1 23L2 23L3 24L1 24L2 24L3
3	PBSMS 1-12	2L1 2L2 2L3 3L1 3L2 3L3 4L1 4L2 4L3 5L1 5L2 5L3 6L1 6L2 6L3 7L1 7L2 7L3 8L1 8L2 8L3 9L1 9L2 9L3 10L1 10L2 10L3
3	PBSMS 13-24	13L1 13L2 13L3 17L1 17L2 17L3 18L1 18L2 18L3 19L1 19L2 19L3 20L1 20L2 20L3 21L1 21L2 21L3 22L1 22L2 22L3
4	PBSMF 1-12	2L1 2L2 2L3 3L1 3L2 3L3 4L1 4L2 4L3 5L1 5L2 5L3 6L1 6L2 6L3 7L1 7L2 7L3 8L1 8L2 8L3 9L1 9L2 9L3 10L1 10L2 10L3
4	PBSMF 13-24	13L1 13L2 13L3 17L1 17L2 17L3 18L1 18L2 18L3 19L1 19L2 19L3 20L1 20L2 20L3 21L1 21L2 21L3 22L1 22L2 22L3
5	PBSMG 1-12	2L1 2L2 2L3 3L1 3L2 3L3 4L1 4L2 4L3 5L1 5L2 5L3 6L1 6L2 6L3 7L1 7L2 7L3 8L1 8L2 8L3 9L1 9L2 9L3 10L1 10L2 10L3 11L1 11L2 11L3
5	PBSMG 13-24	13L1 15L1 15L2 15L3 16L1 16L2 16L3 17L1 17L2 17L3 18L1 18L2 18L3 19L1 19L2 19L3 20L1 20L2 20L3 21L1 21L2 21L3 22L1 22L2 22L3 23L1 23L2 23L3
6	DBPLANT 1-12	1L1 1L2 1L3 2L1 2L2 2L3 3L1 3L2 3L3 4L1 4L2 4L3 5L1 6L1 6L2 6L3 7L1 7L2 7L3 8L1 8L2 8L3 11L1 11L2 11L3 12L1 12L2 12L3

1. **Cabling Req >**: If you enter "**Y**" into this box, you will only see circuits yet to be cabled.
2. **Testing Req >**: If you enter "**Y**" into this box, you will only see circuits yet to be tested.
3. If you enter "**Y**" into both boxes, circuits where cabling and testing are yet to be completed are displayed.

Note 1: By entering "**Y**" in either option above then selecting the "**Search**" tab, all circuits are given more detail.
Note 2: Simply left click any distribution board reference to be taken to that schedule.
Note 3: When you create, modify or delete test schedules, ensure you press the "**Refresh**" button, this is a small square button located on the right hand side of the box labelled "**MCB's currently installed throughout all the distribution boards**", this button can be pressed any time.

Search (BLUE TAB)

This is where you can quickly find a circuit matching any criteria from a maximum total of 2880 circuits.
Starting on the left side, between the words "**No**" and "**Board**" is a "**Refresh**" button, **Note 3** above applies to this search page.

Distboard Manager Circuit Search

Sheet Qty: 140
Length: 1473 Mtrs

No	Board	Cct	MCB	Type	kA	mA	BSEN	Circuit Description	Circuit	Cabling	CCT	CPC	Length	Cabled	Attrib	Qty
1															N	
1	DBPLANT 1-12	2L2	20	B	10		60898	Modbus Power FCU	Radial	6491B	4.00	4.00	35.00	Y	N	1
2	DBPLANT 1-12	2L3	6	C	10		60898	RB2000 & Wifi FCU's	Radial	6491B	4.00	4.00	12.00	Y	N	2
3	DBPLANT 1-12	4L3	20	B	10		60898	Fire smoke Dampers	Radial	6491B	4.00	4.00	40.00	Y	N	3
4	DBPLANT 1-12	5L1	20	B	10		60898	TV Aerial Amplifier	Radial	6491B	4.00	4.00	8.00	Y	N	1
5	DBPLANT 1-12	11L1	20	B	10		60898	Paging System	Radial	3C SWA	2.50	2.50	12.00	Y	N	1
6	DBPLANT 1-12	11L3	20	B	10		60898	Pneumatic-Air	Radial	6491B	4.00	4.00	20.00	Y	N	1
7	DBPLANT 1-12	12L1	63	C	10		60898	/\/\/\/\/\	Radial	6491B	10.00	10.00	1.00	Y	N	1
8	DBPLANT 1-12	12L2	63	C	10		60898	Surge Protection	Radial	6491B	10.00	10.00	1.00	Y	N	1
9	DBPLANT 1-12	12L3	63	C	10		60898	\/\/\/\/\/	Radial	6491B	10.00	10.00	1.00	Y	N	1
10	DBSP1 1-12	7L3	20	B	10	30	61009	Cleaners Sockets Stair.2	Ring	6491B	4.00	4.00	28.00	Y	N	2
11	DBSP1 1-12	10L1	20	B	10		60898	Automatic Doors	Radial	6491B	4.00	4.00	8.00	Y	N	1
12	DBSP2 1-12	5L3	20	B	10		60898	Fire Smoke Dampers	Radial	6491B	4.00	4.00	80.00	Y	N	8
13	DBSP2 1-12	7L2	20	B	10		60898	Fire Smoke Dampers	Radial	6491B	4.00	4.00	80.00	Y	N	3
14	DBSP2 1-12	11L3	32	B	10	30	61009	Cleaners Sockets	Ring	6491B	4.00	4.00	112.00	Y	N	8
15	DBSP4 1-12	7L2	20	B	10		60898	Fire Smoke Dampers	Radial	6491B	4.00	4.00	68.00	Y	N	5
16	DBSP4 1-12	8L2	20	B	10		60898	Fire Smoke Dampers	Radial	6491B	4.00	4.00	70.00	Y	N	9
17	DBSP5 1-12	9L2	20	B	10		60898	Fire Smoke Dampers	Radial	6491B	4.00	4.00	62.00	Y	N	8
18	DBSP5 1-12	11L2	20	B	10		60898	Modbus Power FCU	Radial	6491B	4.00	4.00	2.00	Y	N	1
19	DBSL1 1-12	3L3	6	B	10	30	61009	Stairwell No.2 Level-2	Radial	6491B	2.50	2.50	40.00	Y	N	7
20	DBSL2 1-12	4L1	6	C	10		60898	Riser & Management Store	Radial	6491B	2.50	2.50	40.00	Y	N	2
21	DBSL2 1-12	5L3	6	C	10		60898	Day & Dining Room	Radial	6491B	2.50	2.50	28.00	Y	N	6
22	DBSL4 1-12	3L2	6	B	10	30	61009	Stairwell No.1 Level-2	Radial	6491B	2.50	2.50	40.00	Y	N	7
23	DBSL5 1-12	7L2	6	C	10		60898	RB2000 Controller FCU's	Radial	6491B	2.50	2.50	12.00	Y	N	2
24	DBSL5 1-12	7L3	6	C	10		60898	Office & Meeting	Radial	6491B	2.50	2.50	50.00	Y	N	3
25	DBSL5 1-12	8L3	6	C	10		60898	Reception-Foyer & Riser	Radial	6491B	2.50	2.50	70.00	Y	N	11
26	DBIT3 1-12	6L2	6	C	10		60898	I.T Lighting	Radial	6491B	2.50	2.50	6.00	Y	N	2
27	DBIT3 1-12	7L2	63	C	10		60898	Surge Protection	Radial	6491B	10.00	10.00	1.00	Y	N	1
28	DBFP1 1-12	7L3	20	B	10	30	61009	Cleaners Sockets Stair.2	Radial	6491B	4.00	4.00	28.00	Y	N	2
29	DBFP1 1-12	9L3	20	B	10		60898	Automatic Doors	Radial	6491B	4.00	4.00	26.00	Y	N	2
30	DBFP2 1-12	5L3	20	B	10		60898	Fire Smoke Dampers	Radial	6491B	4.00	4.00	80.00	Y	N	8
31	DBFP2 1-12	7L2	20	B	10		60898	Fire Smoke Dampers	Radial	6491B	4.00	4.00	80.00	Y	N	3
32	DBFP2 1-12	11L3	32	B	10	30	61009	Cleaners Sockets	Ring	6491B	4.00	4.00	112.00	Y	N	4
33	DBFP4 1-12	7L2	20	B	10		60898	Fire Smoke Dampers	Radial	6491B	4.00	4.00	68.00	Y	N	5
34	DBFP4 1-12	8L2	20	B	10		60898	Fire Smoke Dampers	Radial	6491B	4.00	4.00	70.00	Y	N	9
35	DBFP5 1-12	9L2	20	B	10		60898	Fire Smoke Dampers	Radial	6491B	4.00	4.00	62.00	Y	N	8
36	DBFP5 1-12	10L2	6	B	10	30	61009	Ass'td WC Shaver	Radial	6491B	2.50	2.50	20.00	Y	N	1

You will see there is a header bar, beneath each title is a space to write a single word or a wildcard i.e. instead of writing the full word **distribution** you simply write ***dis*** and all entries with those letters inside them are listed, don't forget to add the stars.

In this demonstration, I entered the letter "**N**" into the attribute column, the attribute column is included onto every test schedule. I have used the letter "**N**" instead of "**New**", typing this simply means show all the "**New**" circuits.
This can be performed at the very end of the job to list the extra circuits for cost analysis.

Any letter or code can be used, "**A**" could mean circuit "**Amended**", other codes could refer to site instructions for alterations etc.

The searching layout is that of a typical test schedule, search for details using up to all of the search boxes.
If more than 36 searches are found, simply change the number "**1**" (top left) to a higher number to continue the list.
To select any of the displayed results, right mouse click that cell value to be transported to that particular's schedule and text box.

If you wish to change multiple entries across all the test schedules so they are the same, carry out the following:

1. Use **Search / Circuit Description's**, 3 search boxes to find a circuit description of choice, this will search across all test schedules.
2. Inspect carefully from the list of descriptions, words you would like to change then press the title "**Circuit Description**"
3. A box labelled "**Look for**" will become visible, enter an exact text you want to change, press "**OK**" when done.
4. A box labelled "**Change to**" will become visible, enter the exact replacement text, press "**OK**" when done.
5. You will now be asked a simple "**Yes**" or "**No**" option as follows.
5a. "**Yes**" means to replace every entry looking for regardless if its a text on its own or part of a word and change it.
5b. "**No**" means to replace every entry looking for but only change where the word to be replaced is on its own with no other text.

This feature can not be undone, you use this feature at your own risk as you will make changes to text in all schedules.
Please use caution.

Test Schedules - DB1 1-12

This is 1 of up to 80 test schedules which can be managed using DM.

Address:	Abbey Lodge Mill, Fictional Lane, Surrey, SK3 11HN	DB1	
Supply:	Origin: MLV1 1L123, Sw Mod: NSX400F, Sw Rtg: 400A, Phase(s): 3, Cab I.D: 1, Cab Type: 4C185SWA, CPC: SWA, Earthing: TN-S	⇧ Ref ⇧ ⇩ Location & Dims ⇩	
ELR/PSC:	ELR1: 0.09?, ELR2: 0.09?, ELR3: 0.09?, PSC1: 3.4kA, PSC2: 3.4kA, PSC3: 3.4kA	L0N, Switch Room No.1	
Board Inf:	Sw Mod: NSX630F, Sw Rtg: 630A, Mfr: Schneider, Rng: Powerpact 4, Model: MG6C12, Form: 3B T2, BSEN: 60439 1&3, BUS: 630A, Ways: 12, kA: 36	H: 1493mm, W: 850mm, D: 270mm, Wt: 89kg	

		Fuse Board Legend, Build, Cable & Circuit Information																Earthing & Continuity				Insulation Resistance Meg ?					RCD		ELR		Misc			
	Circuit Ref	I2	Type	kA	mA	Trip BSEN	Trip Time	Circuit Description	Circuit Type	Cabling Type	Ct	Md	Cable mm²	CPC mm²	Circuit Length	(R1) Phase	(Rn) Neutral	(R2) Earth	Total R1+R2	P-P<	P-P>	P-N	N-E	E-P	X1	X5	ELR	Max	CAB	POL	CODE	QTY
1	L1	20	B	6		60898		/\/\/\/\/\	Radial	4C SWA	G2	31	2.50	2.50	66.00	0.03	0.03	0.03	0.06	N/a	>200	>200	>200	>200	N/a	N/a	0.15	1.84	Y	OK		1
	L2	20	B	6		60898		DB No.1	Radial	4C SWA	G2	31	2.50	2.50	66.00	0.03	0.03	0.03	0.05	>200	>200	>200	>200	>200	N/a	N/a	0.14	1.84	Y	OK		1
	L3	20	B	6		60898		\/\/\/\/\/	Radial	4C SWA	G2	31	2.50	2.50	66.00	0.03	0.03	0.03	0.06	>200	N/a	>200	>200	>200	N/a	N/a	0.15	1.84	Y	OK		1
2	L1	32	C	10		60898		/\/\/\/\/\	Radial	4C SWA	G2	31	4.00	4.00	35.00	0.04	0.04	0.04	0.08	N/a	>200	>200	>200	>200	N/a	N/a	0.17	0.58	Y	OK		1
	L2	32	C	10		60898		DB No.2	Radial	4C SWA	G2	31	4.00	4.00	35.00	0.04	0.04	0.04	0.07	>200	>200	>200	>200	>200	N/a	N/a	0.16	0.58	Y	OK		1
	L3	32	C	10		60898		\/\/\/\/\/	Radial	4C SWA	G2	31	4.00	4.00	35.00	0.04	0.04	0.04	0.08	>200	N/a	>200	>200	>200	N/a	N/a	0.17	0.58	Y	OK		1
3	L1	6	D	10		60898		Motor No.1	Radial	3C SWA	G2	31	1.50	1.50	18.00	0.08	0.08	0.08	0.15	>200	>200	>200	>200	>200	N/a	N/a	0.24	1.53	Y	OK		1
	L2	10	D	10		60898		Motor No.2	Radial	3C SWA	G2	31	1.50	1.50	26.00	0.06	0.06	0.06	0.11	>200	>200	>200	>200	>200	N/a	N/a	0.20	0.92	Y	OK		1
	L3	16	D	10		60898		Motor No.3	Radial	3C SWA	G2	31	2.50	2.50	32.00	0.06	0.06	0.06	0.12	>200	>200	>200	>200	>200	N/a	N/a	0.21	0.58	Y	OK		1
4	L1	32	C	10	30	61009	0.4s	Cleaners Sockets	Ring	6491B	D/B	10/4	4.00	4.00	86.00	0.07	0.07	0.07	0.04	>200	>200	>200	>200	>200	28mS	19mS	0.13	0.58	Y	OK		10
	L2	32	C	10	30	61009	0.4s	Cleaners Sockets	Ring	6491B	D/B	10/4	4.00	4.00	48.00	0.08	0.08	0.08	0.04	>200	>200	>200	>200	>200	28mS	19mS	0.13	0.58	Y	OK		7
	L3	40	D	6		60898		Motor No.4	Radial	3C SWA	G2	31	6.00	6.00	40.00	0.06	0.06	0.06	0.12	>200	>200	>200	>200	>200	N/a	N/a	0.21	0.23	Y	OK		1
5	L1	63	C	10		60898		/\/\/\/\/\	Radial	4C SWA	G2	31	10.00	10.00	112.00	0.05	0.05	0.05	0.10	N/a	>200	>200	>200	>200	N/a	N/a	0.19	0.29	Y	OK	N	1
	L2	63	C	10		60898		DB No.3	Radial	4C SWA	G2	31	10.00	10.00	112.00	0.05	0.05	0.05	0.09	>200	>200	>200	>200	>200	N/a	N/a	0.18	0.29	Y	OK	N	1
	L3	63	C	10		60898		\/\/\/\/\/	Radial	4C SWA	G2	31	10.00	10.00	112.00	0.05	0.05	0.05	0.10	>200	N/a	>200	>200	>200	N/a	N/a	0.19	0.29	Y	OK	N	1
6	L1																																
	L2																																
	L3																																
7	L1	32	C	10	30	61009	0.4s	Bench Sockets.1	Ring	6491B	D/B	10/4	4.00	4.00	35.00	0.05	0.05	0.05	0.02	>200	>200	>200	>200	>200	28mS	19mS	0.11	0.58	Y	OK		6
	L2	32	C	10	30	61009	0.4s	Bench Sockets.2	Ring	6491B	D/B	10/4	4.00	4.00	54.00	0.12	0.12	0.12	0.06	>200	>200	>200	>200	>200	28mS	19mS	0.15	0.58	Y	OK		6
	L3	32	C	10	30	61009	0.4s	Bench Sockets.3	Ring	6491B	D/B	10/4	4.00	4.00	28.00	0.13	0.13	0.13	0.07	>200	>200	>200	>200	>200	28mS	19mS	0.16	0.58	Y	OK		6
8	L1	6	B	10		60898		Lighting Row.1	Radial	6491B	D/B	10/4	1.50	1.50	80.00	0.48	0.48	0.48	0.95	>200	>200	>200	>200	>200	N/a	N/a	1.04	6.13	Y	OK		22
	L2	6	B	10		60898		Lighting Row.2	Radial	6491B	D/B	10/4	1.50	1.50	80.00	0.45	0.45	0.45	0.90	>200	>200	>200	>200	>200	N/a	N/a	0.99	6.13	Y	OK		23
	L3	6	B	10		60898		Lighting Row.3	Radial	6491B	D/B	10/4	1.50	1.50	80.00	0.47	0.47	0.47	0.94	>200	>200	>200	>200	>200	N/a	N/a	1.03	6.13	Y	OK		22
9	L1	16	D	10		60898		/\/\/\/\/\	Radial	4C SWA	G2	31	4.00	4.00	35.00	0.23	0.23	0.23	0.46	N/a	>200	>200	>200	>200	N/a	N/a	0.55	0.58	Y	OK		1
	L2	16	D	10		60898		Pump Set	Radial	4C SWA	G2	31	4.00	4.00	35.00	0.23	0.23	0.23	0.46	>200	>200	>200	>200	>200	N/a	N/a	0.54	0.58	Y	OK		1
	L3	16	D	10		60898		\/\/\/\/\/	Radial	4C SWA	G2	31	4.00	4.00	35.00	0.23	0.23	0.23	0.46	>200	N/a	>200	>200	>200	N/a	N/a	0.55	0.58	Y	OK		1
10	L1																																
	L2																																
	L3																																
11	L1																																
	L2																																
	L3																																
12	L1																																
	L2																																
	L3																																

Notes / Exclusions																																	
	E-1	N/a	mm	N/a	?	I-L1	630A	207A	33%	M-1:	Megger																						
	E-2	N/a	mm	N/a	?	I-L2	630A	211A	33%	M-2:	MFT1710																						
* * * This document including its test results is an example * * *	E-3	N/a	mm	N/a	?	I-L3	630A	225A	36%	M-3:	SN0122103556																						
	E-4	N/a	mm	N/a	?	I-N	630A	16.37A	3%	Cal:	Thursday 01-Jan-2015																						

Test Date	Monday 05-Jan-2015		
NICEIC Ref	TBC		
Inspector			
Witness			

There are only a few rules which you must follow when creating or modifying test schedules.

1. Each test schedule can only hold **12 x 3** phase or **36 x 1** phase circuits - the chart shown is a TP&N chart showing 12 ways.
2. Always use references of letters i.e. "**DB1**" then a space then "**1-12**", "**13-24**", "**25-36**" or "**37-48**".
3. Example: I have a **36** way distribution board and its reference is "**DB1**".
4. Press the "**HELP**" button to become familiar with sheet buttons and from the available 6 buttons, press the "**New Chart**" button.
5. When asked to label the new test schedule, label as "**DB1 1-12**", create another two called "**DB1 13-24**" and "**DB1 25-36**".
6. As long as you have entered the details of "**DB1**" into the "**System**", its "**Supply**", "**Board**", "**ELR**" & "**PSC**" details will be listed.
7. Press **CTRL+F** to format test schedules (to set them up as single or 3 phase schedules), can be used at any time to clean up.
8. Press **CTRL+R** to reset all RCBO values, don't perform this task if you have RCD test values entered.
9. As you have created, modified or deleted new test schedules, don't forget to press the "**Refresh**" buttons in the "**Status**", "**Active**" and "**Search**" sheets.
10. DM can automatically enter your **R1**, **Rn**, **R2** and **R1+R2** results, ensure the **ELR/PSC** and **ELR** results are both present then press the small box in between the (**Rn**) and (**R2**) boxes.
11. DM can automatically enter your **ELR** results, ensure the **ELR/PSC** and **R1+R2** results are both present then press the small box in between the (**ELR**) and (**Max**) boxes.

That's the rules outlined, you can now start to fill in the test schedule.

1. Starting at the top right corner, enter a distribution board reference into the box labelled "**Ref No:**", remember this reference also needs to be written into the **System / Board Name & Location / Board** column.
2. The schedule should now set itself up to show the number of ways, the number of ways for this particular distribution board should be written within **Boards / Ways** column, cross check against the **model** number, pressing **CTRL+F** should format the schedule.

The following columns are user input fields:

Screenshot

Fuse Board Legend, Build, Cable & Circuit Information

1. **MCB**: Enter the current rating in Amps for the protective device.
2. **Type**: Enter the type of the protective device.
3. **kA**: Enter the kA rating of the protective device.
4. **mA**: Enter the mA rating of the protective device.
5. **MCB BSEN**: You can not write into this column.
6. **Trip Time**: You can not write into this column.
7. **Circuit Description**: Enter a brief description – try to keep text to 3 x 6 letter words with spaces in between them.
8. **Circuit Type**: Enter "**Radial**" or "**Ring**"
9. **Cabling Type**: Unless singles i.e. **6491B** is written, all other entries must contain a space i.e. **3x4C SWA** or **4C SWA** or **3C FP400**
10. **Code / Ct**: Enter a code from the bottom table found in **Charts**, example 6491B in metal conduit – enter "**B**"
11. **Mthd**: The installation method can be found by looking at table 4A2 from the current version of the BS7671 regulations.
12. **Cable mm²**: Enter the circuit phase & neutral conductor size in mm
13. **CPC mm²**: Enter the circuit copper protective conductor size in mm
14. **Circuit Length**: Enter the entire length of one of the conductors, normally the phase conductor.

Up to this point are details normally found within distribution board charts, the details here or from any test schedule are transferred to Charts when you press **CTRL+M**.

Earthing & Continuity

15. **(R1) Phase**: Enter the resistance of the phase conductor in its entire length.
16. **(Rn) Neutral**: Enter the resistance of the neutral conductor in its entire length
17. **(R2) Earth**: Enter the resistance of the earth conductor in its entire length
18. **Total R1+R2**: You can not write into this column, the total of R1+R2 will be automatically calculated for you as Radial or Ring.

Insulation Resistance Meg-Ohms – Test instrument is set to twice the normal operating voltage, beware of connected equipment.

19. **P-P<**: For all single phase circuits, the entry will be "**N/a**", For all other circuits a measured value must be entered i.e. **>200**
20. **P-P>**: For all single phase circuits, the entry will be "**N/a**", For all other circuits a measured value must be entered i.e. **>200**
21. **P-N**: For all circuits a measured value must be entered i.e. **>200**
22. **N-E**: For all circuits a measured value must be entered i.e. **>200**
23. **E-P**: For all circuits a measured value must be entered i.e. **>200**

RCD – Test instrument is set to the mA rating of the protective device.

24. **X1**: The protective device must isolate the supply within a specified time depending upon the earthing arrangements.
25. **X5**: The protective device must isolate the supply within a specified time depending upon the earthing arrangements.

ELR (Earth Loop Resistance) – Test instrument is set to Ohms.

26. **ELR**: This test measures the total resistance path of Ze (Origin) + R1+R2 (Circuit), the figure must fall below the permitted value as detailed in the Max column, if it fails, the value will be highlighted until it is fixed, i.e. change device or upgrade earthing.
27. **Max**: This is the figure your ELR value must not go above, the figure is the result of several calculations.

Misc

28. **CAB**: This stands for "**Cabled**", if the circuit has been cabled in its entirety, enter "**Y**" otherwise leave blank.
29. **POL**: This stands for "**Polarity**", if the circuit's accessories i.e. sockets & switches are correctly terminated, enter "**OK**"
30. **CODE**: This is to help "**Search**" find circuits matching your code, example "**N**" = New, "**M**" = Modified etc, you make up the code.
31. **QTY**: This stands for "**Quantity**", enter all the accessories terminated to the circuit, count twin sockets as one item.

The right hand side of the test schedule are details which make up the circuit's test results, all the boxes must be filled in.
It is assumed all circuits detailed above have been physically tested using a test instrument.

Note, the above does not dictate how you must carry out electrical testing in any shape way or form, it is a merely a guidance note.

The bottom section of the test schedule details as follow.

1. **Supplementary Earth Bonding**: Conductor size in mm inc resistance values for services such as Gas, Water, Oil or User defined.
2. **Equipotential Earth Bonding**: Conductor size in mm inc resistance values for services such as Gas, Water, Oil or User defined.
3. **Test Kit S/No.s & Cal Date**: You can not write into this row, details are copied here from **Prefs / General Info**.
4. **Notes and/or Exclusions**: Enter notes or exclusions for any circuit detailed on this test schedule.
5. **Test Date**: You can not write into this box, details are entered here from **System / Livened**.
6. **NICEIC Ref**: Enter the reference of the NICEIC serial number which makes up the test certificate.
7. **Inspector**: Enter the person's name who has tested the electrical installation, does this person hold a C&G 2391 certificate?
8. **Witness**: Enter the person's name who has witnessed the Inspectors testing procedure and can verify tested satisfactory.

Printing

If your LV system (combination of Panel-Boards and Distribution-Boards), are greater than the maximum number of distribution boards DM can hold (currently set at 80 test schedules), you may need to clone DM to produce more distribution boards.

If this is the case, you still have the ability to produce test schedules as though all have been printed from one version of DM.

1. When you fill out the NICEIC testing certificate, on the bottom will be a box to complete saying: Sheets **?** of **?**.
2. The NICEIC header forms normally have 3 sheets, then you need to add all the relevant test schedules.
3. Lets say you have **120** individual 12 way TP&N distribution boards, that's **120** test schedules to print.
4. The first **80** test schedules will come from **DM copy 1**, and the next **40** test schedules from **DM copy 2**.
5. So knowing the NICEIC sheets make the first 3 sheets, your total sheet count is **123**.
6. Open **DM copy 1**, select the first test schedule tab, holding the shift key down, select the last test schedule tab.
7. This will select **80** test schedules, now press **CTRL+P**, you will be asked the following:

7a. "Do you need page numbers": Select "**Yes**", if you select "**No**" the test schedules will commence printing.
7b. "Do you want normal page numbers": Select "**No**", if you select "**Yes**" the test schedules will start at page 1 to 80
7c. "Please enter the first page": Enter number "**4**" as the NICEIC sheets take up numbers 1 to 3.
7d. "Please enter the last page": Enter number "**123**" as this is to produce test schedules **4** to **83** of **123**.

8. Select the printer as "**CutePDF**", if you don't have "**CutePDF**" you can link to it from **http://www.alanwelsman.co.uk/referrals.html**
9. Name the PDF file as **4 to 83**.
10. Close **DM copy 1**.
11. Open **DM copy 2**, select the first test schedule tab, holding the shift key down, select the last test schedule tab.
12. This will select **40** test schedules, now press **CTRL+P**, you will be asked the following:

12a. "Do you need page numbers": Select "**Yes**", if you select "**No**" the test schedules will commence printing.
12b. "Do you want normal page numbers": "**No**"
12c. "Please enter the first page": Enter number "**84**".
12d. "Please enter the last page": Enter number "**123**" as this is to produce test schedules **84** to **123** of **123**.

13. Select the printer as "**CutePDF**".
14. Name the PDF file as **84 to 123**.
15. Close **DM copy 2**.
16. You can join both PDF files together to create 1 single PDF file or print both PDF files to an A4 printer.

Shortcut Keys

1. **CTRL+Shift+Z**: This will run the macro "**InsertMACAddress**" - This is a shortcut to display the PC's MAC address.
2. **CTRL+Z**: This will run the macro "**GetPHYSAddress**" - This is a shortcut to display the PC's MAC address.
3. **CTRL+F**: Use only when in a test schedule - Means "**FORMAT SCHEDULE**" - Use this option to reset or clean up schedules.
4. **CTRL+M**: Use only when in a test schedule - Means "**MOVE DATA TO CHART**" - Use this option to create new Charts.
5. **CTRL+R**: Use only when in a test schedule - Means "**RESET RCBO SETTINGS**" - Use this option on a blank schedule only.
6. **CTRL+Shift+C**: This will run the macro "**TransferInfo**" - This can transfer all the details from an active DM-Backup test schedule to an active DM test schedule, you must ensure both files are open prior to using this shortcut key.

Macro's

1. **Chart**: Use only when in a test schedule - Means "**MOVE DATA TO CHART**" - Use this option to create new Charts.
2. **Format**: Use only when in a test schedule - Means "**FORMAT SCHEDULE**" - Use this option to reset or clean up schedules.
3. **GetPHYSAddress**: This is a shortcut to display the PC's MAC address.
4. **HelpMe**: Run this macro to display the tests schedule "**Help**" menu.
5. **InsertMACAddress**: This is a shortcut to display the PC's MAC address.
6. **Master_Reset**: Run this macro to delete all but the first test schedule.
7. **ResetRCD**: Use only when in a test schedule - Means "**RESET RCBO SETTINGS**" - Use this option on a blank schedule only.
8. **ThreePh**: Run this macro to display the tests schedule "**Test Sheet Page Setup**" menu.

Copying/Using Distboard Manager

When you purchase Distboard Manager and open it for the first time, you will be asked to lock the software to your PC, you have 2 open/close events to lock the software before the software becomes non-functional. When you request a keycode or assistance for Distboard manager, please communicate via email, a response will be returned to you if your email address matches the purchaser's verified paypal email address, this will be the only type of communication which will be entertained.
When you lock the software to your PC, Distboard Manager records the current PC's environment, If you copy the software and attempt to use it on another PC, an environmental comparison check will be carried out, if the check fails, the software will cease to function, Distboard Manager remains the property of Alan Welsman at all times, any attempt to disassemble the software will be deemed as criminal damage.

This user guide has been written by Alan Welsman and is subject to change without notice - DM v1.09 dated 31st January 2015